## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (Currently Amended) A monolithic semiconductor integrated circuit for selectively encrypting or decrypting data, transmitted between one of a plurality of devices on the circuit and an external memory, the devices each having a unique identifier comprising:

a plurality of devices each having a unique identifier;

- [[-]]a cryptographic circuit arranged to encrypt or decrypt data;
- [[-]]a plurality of selectable data routes formed from a plurality of data pathways, along which data may flow between the devices and the an external memory, wherein at least one data route passes through the cryptographic circuit and at least one data route does not pass through the cryptographic circuit; and

[[-]]a control arranged to receive the identification unique identifier of a selected one of the devices transferring data, and to select one of the at least one data routes route that passes through the cryptographic circuit, or one of. of the at least one data routes route that does not pass through the cryptographic circuit, according to the unique identifier identification of the selected device.

2. (Currently Amended) A semiconductor <u>integrated</u> circuit according to claim 1 wherein the control is further arranged to select a route that passes through the cryptographic circuit if the control determines that the device transferring data is secure.

- 3. (Currently Amended) A semiconductor <u>integrated</u> circuit according to claim 1 wherein the control is further arranged to select a route that does not pass through the cryptographic circuit if the control determines that the device transferring data is insecure.
- 4. (Currently Amended) A semiconductor <u>integrated</u> circuit according to claim 2 or 3 wherein the control is arranged to use the <u>unique identifier identification</u> to determine that the selected device is secure or insecure.
- 5. (Currently Amended) A semiconductor <u>integrated</u> circuit according to claim 4 wherein the control is further arranged to use the <u>unique identifier identification</u> as an index to a look-up table containing an indication of which of the devices are secure or insecure.
- 6. (Currently Amended) A semiconductor <u>integrated</u> circuit according to <del>any preceding</del> claim <u>1</u> wherein the plurality of devices includes at least one of, a cryptographic processor, direct memory access unit, central processing unit, moving picture experts group decoder, read only memory, programmable transport interface, universal serial bus interface, or broadcast receiver.
- 7. (Currently Amended) A semiconductor <u>integrated</u> circuit according to <del>any</del> preceding claim <u>1</u> wherein the data includes video data, audio data, encryption keys, or data broadcast over air.
- 8. (Currently Amended) A semiconductor <u>integrated</u> circuit according to <u>any</u> <u>preceding</u> claim 1, <u>wherein the control is</u> further arranged to <u>transmit</u> cause the cryptographic <u>circuit to encrypt</u> data <u>transmitted</u> from a first device <u>of the devices</u> to the external memory, <u>wherein the data is selectively encrypted</u> only if <u>the the</u> first device is secure, and to <u>transmit the</u> <u>cause the cryptographic circuit to decrypt</u> data from the external memory to a second device, <u>wherein the data is selectively decrypted</u> <u>of the devices</u> only if the second device is secure.

- 9. (Currently Amended) A semiconductor <u>integrated</u> circuit according to <del>any</del> preceding claim <u>1</u> wherein the external memory is separated into a plurality of mutually exclusive regions, and the circuit further comprises:
- [[- ]]a register for storing data for distinguishing the regions of the external memory; and
- [[-]]a filter through which the data routes connecting the devices and the external memory pass, arranged to selectively block <u>a\_data accesses\_access\_to</u> or from the external memory according to the <u>identification\_unique identifier\_of the\_a\_device, of the devices,</u> requesting the data access, and according to which region of the external memory is being accessed.
- 10. (Currently Amended) A semiconductor integrated circuit according to claim 9 wherein some of the regions of the external memory store privileged data, and the other regions of the external memory store unprivileged data.
- 11. (Currently Amended) A semiconductor integrated circuit according to claim 9 or 10-wherein the register is arranged to store the start and end memory addresses of each region of the external memory.
- 12. (Currently Amended) A semiconductor integrated circuit according to claim 11 wherein the filter is arranged to compare the a\_memory address of the data being accessed with the contents of the register to determine which region of the external memory is being accessed.
- 13. (Original) A semiconductor integrated circuit according to claim 12 wherein the filter is arranged to selectively block data accesses requested by secure devices to unprivileged regions of data.

- 14. (Original) A semiconductor integrated circuit according to claim 12 wherein the filter is arranged to selectively block data accesses requested by insecure devices to privileged regions of data.
- 15. (Currently Amended) A television decoder comprising the semiconductor integrated circuit according to any preceding claim 1 wherein the semiconductor integrated circuit is a television decoder.
- 16. (Currently Amended) A method—for selectively encrypting or decrypting data transmitted between one of a plurality of devices, the devices each having a unique identifier, and an external memory, the data being transmitted along one of a plurality of selectable data routes formed from a plurality of data pathways, wherein at least one data route passes through a cryptographic circuit and at least one data route does not pass through the cryptographic circuit, comprising the steps of:

transmitting data between one of a plurality of devices, the devices each having a unique identifier, and an external memory, the data being transmitted along one of a plurality of selectable data routes formed from a plurality of data pathways, wherein at least one data route passes through a cryptographic circuit and at least one data route does not pass through the cryptographic circuit;

selectively encrypting or decrypting the transmitted data, the selectively encrypting or decrypting including:

- [[-]]receiving the identification of a selected one of the devices;
- [[-]]selecting a data route of the at least one data route that either passes through the cryptographic circuit, or one of the at least one data routes route that does not pass through the cryptographic circuit, according to the unique identifier identification of the selected device.
- 17. (Original) The method according to claim 16 further comprising the steps of determining that the device transferring data is secure, and selecting a data route that passes through the cryptographic circuit if the device is secure.

- 18. (Original) The method according to claim 16 further comprising the steps of determining that the device transferring data is insecure, and selecting a data route that does not pass through the cryptographic circuit if the device is insecure.
- 19. (Currently Amended) The method according to claim <del>17 or 18 further that the comprising the step of using the unique identifier identification to determine that whether the selected device is secure or insecure.</del>
- 20. (Currently Amended) The method according to claim 19 further comprising the step of using the <u>unique identifier identification</u> as an index to a <u>look-uplook-up</u> table containing an indication of which of the devices are secure or insecure.
- 21. (Currently Amended) The method according to <u>any of claimsclaim</u> 16 to 20-wherein the plurality of devices includes at least one of, a crypto core, direct memory access unit, central processing unit, moving picture experts group decoder, read only memory, programmable transport interface, universal serial bus interface, or broadcast receiver.
- 22. (Currently Amended) The method according to any of claimsclaim 16 to 21-wherein the data includes video data, audio data, encryption keys, or data broadcast over air.
- 23. (Currently Amended) The method according to any of claimsclaim 16 to 22 further comprising the steps of:
  - [[-]]transmitting data from a first device of the devices to the external memory; [[-selectively]]encrypting the data only if the first device is secure;
- [[- ]]transmitting the data from the external memory to a second device of the devices; and

[[-selectively ]]decrypting the data only if the second device is secure.

- 24. (Currently Amended) The method according to any of claimsclaim 16 to 23-wherein the external memory is separated into a plurality of mutually exclusive regions, the method further comprising the steps of:
  - [[-]]determining which region of the external memory is being accessed;
- [[-]]selectively blocking the <u>a</u> data <u>accesses</u> to or from the external memory according to the <u>unique identifier identification</u> of the <u>a</u> device, of the devices, requesting the data access, and according to which region of the external memory is being accessed.
- 25. (Original) The method according to claim 24 wherein some of the regions of the external memory store privileged data, and the other regions of the external memory store unprivileged data.
- 26. (Currently Amended) The method according to claim 24 or 25 wherein the step of determining which region of the external memory is being accessed comprises the step of comparing the <u>a</u> memory address of the data being accessed with the start and end memory addresses of each region of the external memory.
- 27. (Original) The method according to claim 26 wherein data accesses requested by secure devices to unprivileged regions of data are selectively blocked.
- 28. (Original) The method according to claim 26 wherein data accesses requested by insecure devices to privileged regions of data are selectively blocked.
  - 29. (New) A system, comprising:

an external memory; and

- a monolithic semiconductor integrated circuit for selectively encrypting or decrypting data, the semiconductor integrated circuit including:
  - a plurality of devices each having a unique identifier
  - a cryptographic circuit arranged to encrypt or decrypt data;

a plurality of selectable data routes formed from a plurality of data pathways, along which data may flow between the devices and the external memory, wherein at least one data route passes through the cryptographic circuit and at least one data route does not pass through the cryptographic circuit; and

a control arranged to receive the unique identifier of a selected one of the devices transferring data, and to select one of the at least one data route that passes through the cryptographic circuit, or one of the at least one data route that does not pass through the cryptographic circuit, according to the unique identifier of the selected device.

- 30. (New) A system according to claim 29 wherein the control is further arranged to select a route that passes through the cryptographic circuit if the control determines that the device transferring data is secure.
- 31. (New) A system according to claim 29 wherein the control is further arranged to select a route that does not pass through the cryptographic circuit if the control determines that the device transferring data is insecure.
- 32. (New) A system according to claim 29 wherein the control is further arranged to use the unique identifier as an index to a look-up table containing an indication of which of the devices are secure or insecure.
- 33. (New) A system according to claim 29, wherein the control is further arranged to cause the cryptographic circuit to decrypt data from the external memory to one of the devices only if the one of the devices is secure.
- 34. (New) A system according to claim 29 wherein the external memory is separated into a plurality of mutually exclusive regions, and the circuit further comprises:
- a register for storing data for distinguishing the regions of the external memory; and

a filter through which the data routes connecting the devices and the external memory pass, arranged to selectively block a data access to or from the external memory according to the unique identifier of a device, of the devices, requesting the data access, and according to which region of the external memory is being accessed.

- 35. (New) A system according to claim 34 wherein the filter is arranged to selectively block data accesses requested by secure devices to unprivileged regions of data.
- 36. (New) A system according to claim 34 wherein the filter is arranged to selectively block data accesses requested by insecure devices to privileged regions of data.